

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1-15 (Canceled)
16. (New) A composition based on cerium oxide and on zirconium oxide in a Ce/Zr atomic proportion of at least 1, exhibiting a level of reducibility of at least 70% and a specific surface of at least 15 m²/g.
17. (New) The composition as claimed in claim 16, wherein the level of reducibility is of at least 75%.
18. (New) The composition as claimed in claim 17, wherein the specific surface is of at least 20 m²/g.
19. (New) The composition as claimed in claim 18, wherein the Ce/Zr atomic proportion is of at most 1.4.
20. (New) The composition as claimed in claim 16, further comprising at least one lanthanide element other than cerium.
21. (New) The composition as claimed in claim 16, further comprising at least one precious metal.
22. (New) The composition as claimed in claim 21, further comprising at least one lanthanide element other than cerium.
23. (New) The composition as claimed in claim 22, wherein the precious metal is platinum, rhodium, palladium, iridium, silver or gold.

24. (New) A process for the preparation of a composition as defined in claim 16, comprising the stages of:

- (a) forming a mixture comprising compounds of cerium, of zirconium and optionally of an abovementioned element;
- (b) adding to said mixture a basic compound, whereby a precipitate is obtained;
- (c) heating said precipitate in an aqueous medium; then
- (d) either adding first to the medium obtained in stage c) an additive which is an anionic surfactant, nonionic surfactant, polyethylene glycol, carboxylic acid, salt of a carboxylic acid, ethoxylate of a fatty alcohol surfactant which is carboxymethylated, and, optionally, subsequently separating said precipitate; or
- (d') or separating first said precipitate and subsequently adding said additive to the precipitate;
- (e) milling the precipitate obtained in the preceding stage; and
- (f) calcining the precipitate thus obtained in stage e) under an inert gas or under vacuum, in a first step, at a temperature of at least 850°C, and then under an oxidizing atmosphere, in a second step, at a temperature of at least 400°C.

25. (New) A process for the preparation of a composition as claimed in claim 16, comprising the stages of:

- (a) forming a mixture comprising compounds of cerium, of zirconium and optionally of an abovementioned element;
- (b) heating the mixture, whereby a precipitate is obtained;
- (c) (d) either adding first to the medium obtained in stage c) an additive which is a

nonionic surfactant, polyethylene glycol, carboxylic acid, salt of a carboxylic acid, ethoxylate of a fatty alcohol surfactant which is carboxymethylated, and, optionally, subsequently separating said precipitate; or

(c') or separating first said precipitate and subsequently adding said additive to the precipitate;

(d) milling the precipitate obtained in the preceding stage; and

(e) calcining the precipitate thus obtained under an inert gas or under vacuum, in a first step, at a temperature of at least 850°C, and then under an oxidizing atmosphere, in a second step, at a temperature of at least 400°C.

26. (New) The process as claimed in claim 24, wherein the compound of zirconium, of cerium and of the abovementioned element, is a nitrate, sulfate, acetate, chloride or ceric ammonium nitrate.

27. (New) The process as claimed in claim 25, wherein the compound of zirconium, of cerium and of the abovementioned element, is a nitrate, sulfate, acetate, chloride or ceric ammonium nitrate.

28. (New) The process as claimed in claim 26, wherein the heating of the precipitate from stage (c) or of the mixture from stage (b) is carried out at a temperature of at least 100°C.

29. (New) The process as claimed in claim 27, wherein the heating of the precipitate from stage (c) or of the mixture from stage (b) is carried out at a temperature of at least 100°C.

30. (New) The process as claimed in in claim 24, wherein a wet milling is carried out.
31. (New) The process as claimed in in claim 24, wherein the milling is carried out by subjecting a suspension of the precipitate to shearing.
32. (New) The process as claimed in in claim 24, wherein a precious metal is added to the precipitate resulting from stage (d) or (d') or from stage (c) or (c').
33. (New) The process as claimed in in claim 25, wherein a precious metal is added to the precipitate resulting from stage (d) or (d') or from stage (c) or (c').
34. (New) A catalytic system, comprising a composition as defined in claim 16.
35. (New) A process for the treatment of exhaust gases from internal combustion engines, comprising the step of treating said gases with a catalytic system as claimed in claim 34.